

APPENDIX I

DEFINITIONS

BEST TRACK - A subjectively smoothed path, versus a precise and very erratic fix-to-fix path, used to represent tropical cyclone movement.

CENTER - The vertical axis or cone of a tropical cyclone. Usually determined by wind, temperature, and/or pressure distribution.

CYCLONE - A closed atmospheric circulation rotating about an area of low pressure (counter-clockwise in the northern hemisphere).

EPHEMERIS - Position of a body (satellite) in space as a function of time; used for gridding satellite imagery. Since ephemeris gridding is based solely on the predicted position of the satellite, it is susceptible to errors from vehicle pitch, orbital eccentricity, and the oblateness of the earth.

EXPLOSIVE DEEPENING - A decrease in the minimum sea-level pressure of a tropical cyclone of 2.5 mb/hr for 12 hours or 5.0 mb/hr for six hours (ATR 1971).

EXTRATROPICAL - A term used in warnings and tropical summaries to indicate that a cyclone has lost its "tropical" characteristics. The term implies both poleward displacement from the tropics and the conversion of the cyclone's primary energy sources from release of latent heat of condensation to baroclinic processes. The term carries no implications as to strength or size.

EYE - A term used to describe the central area of a tropical cyclone when it is more than half the surrounded by wall cloud.

FUJIWARA EFFECT - An interaction in which tropical cyclones within about 700 nm (1296 km) of each other begin to rotate about one another. When intense tropical cyclones are within about 400 nm (741 km) of each other, they may also begin to move closer to each other.

MAXIMUM SUSTAINED WIND - Highest surface wind speed averaged over a one-minute period of time. Peak gusts over water average 20 to 25 percent higher than sustained winds.

RAPID DEEPENING - A decrease in the minimum sea-level pressure of a tropical cyclone of 1.25 mb/hr for 24-hours (ATR 1971).

RECURVATURE - The turning of a tropical cyclone from an initial path toward the west or northwest to a path toward the northeast.

SIGNIFICANT TROPICAL CYCLONE - A tropical cyclone becomes "significant" with the issuance of the first numbered warning by the responsible warning agency.

SUPER TYPHOON/HURRICANE - A typhoon/hurricane in which the maximum sustained surface wind (one-minute mean) is 130 kt (67 m/s) or greater.

TROPICAL CYCLONE - A non-frontal low-pressure system of usually synoptic scale developing over tropical or subtropical waters and having a definite organized circulation.

TROPICAL CYCLONE AIRCRAFT RECONNAISSANCE COORDINATOR - A USCINCPACAF representative designated to levy tropical cyclone aircraft weather reconnaissance units within a designated area of the PACOM and to function as coordinator between USCINCPACAF and the appropriate typhoon/hurricane warning center.

TROPICAL DEPRESSION - A tropical cyclone in which the maximum sustained surface wind (one-minute mean) is 33 kt (17 m/s) or less.

TROPICAL DISTURBANCE - A discrete system of apparently organized convection - generally 100 to 300 nm (185 to 556 km) in diameter - originating in the tropics or subtropics, having a non-frontal migratory character, and having maintained its identity for 12- to 24-hours. It may or may not be associated with a detectable perturbation of the wind field. As such, it is the basic generic designation which, in successive stages of intensification, may be classified as a tropical depression, tropical storm or typhoon (hurricane).

TROPICAL STORM - A tropical cyclone with maximum sustained surface winds (one-minute mean) in the range of 34 to 63 kt (17 to 32 m/s) inclusive.

TROPICAL UPPER-TROPOSPHERIC TROUGH (TUTT) - A dominant climatological system (upper-level trough) and a daily synoptic feature, of the summer season over the tropical North Atlantic, North Pacific and South Pacific Oceans.

TYPHOON/HURRICANE - A tropical cyclone in which the maximum sustained surface wind (one-minute mean) is 64 kt (33 m/s) or greater. West of 180 degrees they are called hurricanes. Foreign governments use these or other terms for tropical cyclones and may apply different intensity criteria.

WALL CLOUD - An organized band of cumuliform clouds immediately surrounding the central area of a tropical cyclone. The wall cloud may entirely enclose or partially surround the center.

APPENDIX II

NAMES FOR TROPICAL CYCLONES

<u>Column 1</u>	<u>Column 2</u>	<u>Column 3</u>	<u>Column 4</u>
ANDY	ABBY	ALEX	AGNES
BRENDA	BEN	BETTY	BILL
CECIL	CARMEN	CARY	CLARA
DOT	DOM	DINAH	DOYLE
ELLIS	ELLEN	ED	ELSIE
FAYE	FORREST	FREDA	FABIAN
GORDON	GEORGIA	GERALD	GAY
HOPE	HERBERT	HOLLY	HAL
IRVING	IDA	IAN	IRMA
JUDY	JOE	JUNE	JEFF
KEN	KIM	KELLY	KIT
LOLA	LEX	LYNN	LEE
MAC	MARGE	MAURY	MAMIE
NANCY	NORRIS	NINA	NELSON
OWEN	ORCHID	OGDEN	ODESSA
PEGGY	PERCY	PHYLLIS	PAT
ROGER	RUTH	ROY	RUBY
SARAH	SPERRY	SUSAN	SKIP
TIP	THELMA	THAD	TESS
VERA	VERNON	VANESSA	VAL
WAYNE	WYNNE	WARREN	WINONA

NOTE:

Names are assigned in rotation, alphabetically. When the last name (WINONA) has been used, the sequence will begin again with "ANDY".

Source: CINCPACINST 3140.1 (series)

APPENDIX III

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APPENDIX IV

PAST ANNUAL TROPICAL CYCLONE REPORTS

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<p>ANNUAL PUBLICATION SUMMARIZING THE TROPICAL CYCLONE SEASON IN THE WESTERN NORTH PACIFIC, BAY OF BENGAL AND THE ARABIAN SEA, AND SOUTH PACIFIC AND SOUTH INDIAN OCEANS. A BEST TRACK IS PROVIDED FOR EACH SIGNIFICANT TROPICAL CYCLONE. A BRIEF NARRATIVE IS GIVEN FOR ALL TYPHOONS AND SELECTED TROPICAL CYCLONES IN THE WESTERN NORTH PACIFIC AND NORTH INDIAN OCEAN. ALL RECONNAISSANCE DATA USED TO CONSTRUCT THE BEST TRACKS ARE PROVIDED. FORECAST VERIFICATION DATA AND STATISTICS FOR THE JOINT TYPHOON WARNING CENTER (JTWC) ARE SUMMARIZED.</p>					
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BLOCK 18 (CONTINUED)
TROPICAL CYCLONE BEST TRACK DATA
TROPICAL CYCLONE FORECASTING
AIRCRAFT RECONNAISSANCE
DYNAMIC TROPICAL CYCLONE MODELS
TYPHOON ANALOG MODEL
TROPICAL CYCLONE STEERING MODEL
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TROPICAL CYCLONE FIX DATA

1986 ANNUAL TROPICAL CYCLONE REPORT ERRATA SHEET

CHANGES FOLLOW.

1. Page iii - Add "Special thanks to Mr. Charles Mauck for his assistance with data reduction."
2. Page iv - TROPICAL CYCLONE - "(13) TY ABBEY" should read, "(13) TY ABBY".
3. Page vi - "CPA Closest Point to Approach" should read, "CPA Closest Point of Approach".
4. Page vi - "HATRACK" should read "HATTRACK".
5. Page vi - definition for "INJAH" should read, "North Indian Ocean Component of TYAN".
6. Page 2, under Section 4. ANALYSES, paragraph 2, in line 5 - delete "six" and replace with "three". On the next line delete "29,000 feet (8,839 m)" and replace with "31,000 feet (9,448m)".
7. Page 5, paragraph under Section 1. GENERAL, last line - "1985" should read, "1986".
8. Page 7, Figure 2-2 - arrow is missing that indicates NOAA9 operations extended through December.
9. Page 10, last paragraph - "Tables 3-1 through 3-6" should read, "Tables 3-1 through 3-4".
10. Page 26, expanded section of best track - the missing DTG should be 180000Z.
11. Page 52, Figure 3-08-2 - text of caption should be switched with caption under Figure 3-08-5 on page 53 and visa versa.
12. Page 81, first line - delete "digitally".
13. Page 106, Figure 3-18-2 - surface pressure report "09" at position 17.1N 154.3E should read, "009". Pressure report "08" at position 14.5N 154.5E should read, "008", and "8" at 17.8N 150.8E should read "008".
14. Page 117, Figure 3-21-1 - on the image the labelling "IDA" should read "HERBERT" and "JOE" should read, "IDA".
15. Page 133, Figure 3-25-1 - in first line of caption delete "passed south" and insert "was approximately 500 nm (926 km) southeast".
16. Page 146 - Best track for TC03A should appear on page 150.
17. Page 147, Figure 3-01B-1 - on the image the labelling "TC06S" should read "TC04S".

18. Page 150 - Best track of TC01B should appear on page 146.
19. Page 151, Figure 3-03A-1 - in line 2 of the caption delete "Cyclone".
20. Page 151, Figure 3-03A-1 - image should be rotated clockwise ninety degrees for proper orientation.
21. Page 171, in Section titled Tropical Cyclone Prediction Research - Delete lines 19 through 24.
22. Page 171, in Section titled Automated Tropical Cyclone Forecasting System, second paragraph - after line 2 insert the following text:

"tropical cyclone warning" procedure. New forecasters can gather valuable hands-on experience of the warning procedure during their training period."

Then add three additional blank lines before the start of the next Section titled, Tropical Cyclone Inner Regional Circulation Classification.
23. Page 172, Section titled Tropical Cyclone Condition Setting Aid - after line 7, which ends with "evasion action that", delete the next 3 lines and add the following:

"would be unwarranted at lower risk levels. A rule for deciding such actions can be derived on an expected outcome basis (e.g. cost/benefits ratio). The CHARM model is now being adapted for seven North Pacific sites: Pearl Harbor, Guam, Subic Bay, Buckner Bay, Yokosuka, Sasebo, and Pusan."
24. Page 186, definition of TYPHOON/HURRICANE - in line 3 delete "West" and insert "East".
25. Page 189 - in Sadler, J. C. reference "NAVENVPREDRSCHFACO" should read, "NAVENVPREDRSCHFAC".
26. Page 191 - "NOCD, DIEGO GARCIA (20" should read, "NOCD, DIEGO GARCIA (2)".